



Interim Guidelines for Animal Health and Control of Disease Transmission in Pet Shelters

These Interim Guidelines have been developed by consultation between the American Veterinary Medical Association and the U.S. Centers for Disease Control and Prevention and are advisory in nature. They are intended to provide guidance for the care of animals entering shelters and for persons working with or handling the animals in response to Hurricane Katrina. The guidance reflects information available as of September 2005 and may be updated as more information becomes available.

Animals arriving at shelters as a result of Hurricane Katrina need special care. Because they have been exposed to contaminated flood waters and have not had access to safe food and fresh water, many are stressed and dehydrated and some may be injured and/or ill. Stressed animals may or may not show signs of illness and may also exhibit behavioral disorders. Following some simple animal management and disease control guidelines can help improve animal health and reduce the risk of disease transmission and injury between animals and people.

What follows are some recommendations for pets arriving at animal shelters.

Animal Health History, Examinations and Identification

- Each animal should be examined at a triage site. Particular attention should be paid to hydration status, cuts and abrasions, paw health (e.g., pads and claws, area between toes), ear health (e.g., redness, discharge), oral injuries (may have occurred if animal was foraging for food), vomiting and/or diarrhea, respiratory disease, and evidence of parasite infestation.
- Animals should be bathed upon entry, particularly if they may have been in contact with contaminated flood water. Dawn™ dish soap can remove petroleum and some other toxic chemicals. The bather should wear protective clothing (e.g. rain suits or ponchos), gloves, and a face shield or goggles with a surgical mask to avoid mucous membrane contact with droplets and splashes that may contain toxic materials.
- Intake personnel should ask whether the pet has been in the custody of the owner since the beginning of the evacuation, and should inquire about the animal's health and vaccination history, paying particular attention to any current medical needs or chronic health problems (e.g., diabetes, which would signal a need for insulin injections). In addition, owners should be questioned about the animal's usual temperament (e.g., whether the animal can safely be housed with others of the same species, might it be aggressive toward caretakers).
- A health record for each individual animal should be created and updated as needed. Identification information for the animal should correspond to that for the owner, so that animals and their owners can be reunited. Owned animals should be clearly marked as "owned" and not "abandoned" to reduce the risk of mix-ups. Photographs should be taken, if possible. A collar (leather or nylon, not a choke chain) containing readily legible identification information should be placed on all animals. Ideally, all animals should be microchipped.
- Cages should be clearly labeled so that newly arriving personnel are easily apprised of the health status and temperament of sheltered animals.

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- Animals arriving without owners should be scanned for microchip identification. Microchips are most often placed between the shoulder blades, but earlier models were prone to migration, so animals should be scanned from the shoulder blade down to the ventral chest. All scanners are not capable of reading all microchips, so if multiple types of scanners are available, scan with each type before declaring an animal to be microchip-free. Animals without microchips should be checked for other forms of identification such as an identification tag or a tattoo (for dogs this may be the AKC registration number) and this information should be used to trace the animal, if possible.

Animal Health Management and Prevention and Treatment of Zoonotic and Nosocomial Diseases

Intestinal Parasitism

- Dogs should be treated prophylactically for internal parasites including *Giardia*, roundworms, hookworms, and whipworms.
- Exposure to mosquitoes in flood-ravaged areas presents an increased risk of heartworm disease. If possible, dogs should be tested for heartworms and appropriate preventatives or treatment administered.

External Parasitism

- Dogs and cats should be examined for flea or tick infestation, and treated appropriately.
- Preventive flea and tick treatments should be considered for all dogs and cats housed in shelters.

Vaccinations

While the American Veterinary Medical Association normally recommends that vaccination programs be customized to individual animals, in disaster situations vaccination status may be difficult, if not impossible, to determine. For this reason, administration of "core" vaccines to animals upon admission to shelters is considered appropriate. Vaccines take some time to become effective and will not address pre-existing exposures, so personnel are cautioned to be alert for clinical signs of disease.

- A rabies vaccination should be administered to dogs, cats and ferrets. This is especially important for dogs and cats housed in group settings. Personnel should be aware that rabies vaccines may take as long as 28 days to become protective.
- Additional core vaccinations for dogs include distemper, hepatitis, parvovirus and parainfluenza.
- Additional core vaccinations for cats include feline viral rhinotracheitis, panleukopenia and calicivirus. Feline leukemia vaccine should be considered for young kittens that will be housed in close proximity to other cats.
- Vaccination (intranasal) against *Bordetella bronchisepta* should be considered for all dogs and cats to reduce the incidence of kennel cough.
- Because leptospirosis risk is higher in flood-ravaged areas and because the disease is zoonotic, vaccination should be considered. Personnel are cautioned that leptospirosis vaccines are serovar-specific, and that the potential for adverse reactions may be higher than for some other vaccines.

Diarrheal Disease

- Animals presenting with (or developing) diarrhea should be separated from healthy animals (see "Facilities Management").
- Nosocomial agents of concern that may be transmitted by feces include parvovirus, *Giardia*, and intestinal parasites.
- Zoonotic agents of concern for small animals include *Cryptosporidia*, *Campylobacter* and *Salmonella*, which are highly infectious and has been associated with outbreaks in shelters and veterinary clinics.

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Behavioral Concerns

- Fear, panic, separation anxiety, noise and storm phobias, and other behavioral disorders are common problems in displaced animals. Animals that have never had these problems may develop them and pre-existing problems are likely to worsen.
- Providing housed animals with fresh food and water on a regular basis and establishing other familiar routines will assist animals in adjusting to their new environment. Food and water should be provided at multiple smaller and dispersed stations, rather than a few large clumped stations, to minimize fear, competition and fighting among unfamiliar animals.
- Animals without a prior history of aggression may snap, bite or hiss as a result of fear or uncertainty. Shelter personnel should approach rescued animals calmly, but cautiously. Only experienced personnel should handle animals that exhibit significant behavioral disorders.
- Behavioral exercises and behavioral medications may be administered short- or long-term, as required, to help animals recover. Shelters are encouraged to seek assistance from qualified animal and veterinary behaviorists who can assist them in meeting these needs.

Euthanasia

- Animals that are irreversibly ill or exhibiting intractable signs of aggression should be humanely euthanized.
- Animals that have been previously associated with transmission of monkeypox (e.g., prairie dogs, African rodents) are under legal restrictions for movement, except to a veterinarian for care. If one of these high-risk species is presented for veterinary care at a shelter, they must be kept isolated from other animals and housed in individual cages. If this cannot be accomplished, these animals must be humanely euthanized.

Personal Protection for Caretakers

- Wash hands with soap and water
 - Before and after handling each animal
 - After coming into contact with animal saliva, urine, feces or blood
 - After cleaning cages
 - Before eating meals, taking breaks, smoking or leaving the shelter
 - Before and after using the restroom.
- Wear gloves when handling sick or wounded animals.
- Wear gloves when cleaning cages.
- Consider use of goggles or face protection if splashes from contaminated surfaces may occur.
- Bring a change of clothes to wear home at the end of the day.
- Bag and thoroughly clean clothes worn at the shelter.
- Do not allow rescued animals to “kiss” you or lick your face.
- Do not eat in animal care areas.
- Whenever possible, caretakers should have completed a 3-dose prophylactic vaccination series for rabies.

Avoiding Bites and Scratches

- Use caution when approaching any animal that may be sick, wounded or stressed.
- If available use thick gloves, restraints or sedation to handle aggressive animals.
- If bitten or scratched, thoroughly wash wound with soap and water and seek medical care.
- Because the exposure histories of these animals are unknown, bites from dogs, cats and ferrets may be considered a risk for rabies, even if the animal appears healthy and has been vaccinated. Therefore, personnel who are bitten should be evaluated for rabies risk. Dogs, cats and ferrets that bite a person may be quarantined for 10 days and observed for signs of rabies. If an animal develops signs of rabies or dies during the 10-day period following the bite, it should be tested for rabies.

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Facility Management

Separation of Animals

- Animals should not be housed or permitted in food or break areas.
- Separate newly arriving animals from animals that have been housed one week or longer.
- Animals of different species should not be housed together (ex, do not place a ferret and a rabbit in the same cage).
- Avoid caging animals from different households together. If animals of the same species come into the shelter together and the owner requests that they be caged together, this should be allowed as it may decrease an animal's stress if it is housed with a companion. This should not be done if the owner indicates the animals do not get along with one another.
- If animals of unknown origin must be housed together, care should be taken to not mix genders for unneutered animals.
- Routinely monitor animals for signs of illness. Separate sick animals from healthy animals, especially animals with diarrhea or signs of upper respiratory disease. If a separate room or area is not available, animals with diarrhea or signs of respiratory disease should be housed in bottom cages.
- People assigned to care for sick animals should care for those animals only, and should not move between sick and healthy animals.
- Limit contact of young children, the elderly, pregnant women and immunocompromised people with rescue animals; particularly animals that are ill.

Cleaning and Disposal

- Thoroughly clean and disinfect cages between animals.
- Remove and dispose of animal waste in a timely manner.
- Double bag and remove dead animals shortly after death. A log of animals that have died or have been humanely euthanized should be kept. This log should include animal identification and/or descriptive information for each animal.
- Identify an area separate from the shelter for carcass storage and disposal.
- Arrange for waste removal from the pet shelter.
- Pet shelters should have adequate lighting, water and wastewater disposal.

Environmental Security

- If at all possible, devise strategies to prevent wild rodents from mixing with shelter animals.
- Keep food supplies away from wild rodents.

A Note on the Human-Animal Bond and the Well-Being of Pets and Owners

Separation of pets and owners is a difficult issue. Media coverage of hurricane Katrina is replete with examples of people who refused to be evacuated from affected areas without some assurance that their pets would be saved and cared for as well. When people have lost everything, their pets can be an important source of emotional support. This is particularly true for those without family or a strong human social network. Removal of this last remnant of normality and comfort can be psychologically traumatic.

Despite the importance of the owner-pet relationship, limited availability of suitable housing, as well as animal and public health and safety concerns, will make housing pets in shelters or foster homes not only necessary, but in the best interest of most pets and their owners. Foster homes are an alternative that can provide some semblance of routine and reduce crowding and stress in shelters that might otherwise predispose animals to injury and disease.

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For additional information about rescue efforts, animal health and welfare, particular diseases or conditions, or infection control please call these organizations or visit their websites:

Louisiana SPCA – Laura Maloney 225-413-8813

East Baton Rouge Animal Control – Hilton Cole 225-774-7700

LSU School of Veterinary Medicine – Dr. Becky Adcock – 225-578-9900

Louisiana Veterinary Medical Association – 1-800-524-2996 or 225-928-5862

CDC Healthy Pets Healthy People – www.cdc.gov/healthypets

American Veterinary Medical Association – www.avma.org

Veterinary Medical Assistance Teams – www.vmat.org

Association of Shelter Veterinarians – www.sheltervet.org

American College of Veterinary Behaviorists – www.veterinarybehaviorists.org

The Center for Food Security and Public Health – www.cfsph.iastate.edu/brm

For more information, visit www.bt.cdc.gov/disasters,
or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).

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